



**UNIVERSITY OF SWAZILAND**  
**Faculty of Health Sciences**  
**DEGREE IN ENVIRONMENTAL HEALTH**  
**SUPPLEMENTARY EXAMINATION PAPER 2007-8**

**TITLE OF PAPER** : Introduction to Environmental Toxicology II

**COURSE CODE** : EHS 558

**DURATION** : 2 HOURS

**MARKS** : 100

**INSTRUCTIONS** :

- : **READ THE QUESTIONS & INSTRUCTIONS CAREFULLY**
- : **ANSWER ANY FIVE QUESTIONS**
- : **EACH QUESTION CARRIES 20 MARKS.**
- : **WRITE NEATLY & CLEARLY**
- : **NO PAPER SHOULD BE BROUGHT INTO NOR OUT OF THE EXAMINATION ROOM.**
- : **BEGIN EACH QUESTION ON A SEPARATE SHEET OF PAPER.**

**DO NOT OPEN THIS QUESTION PAPER UNTIL PERMISSION IS GRANTED BY THE INVIGILATOR.**

**UNIVERSITY OF SWAZILAND**

**DEPARTMENT OF ENVIRONMENTAL HEALTH SCIENCE**

**INTRODUCTION TO TOXICOLOGY II - SUPPLEMENTARY**

**QUESTION 1**

- a) Differentiate between neuropathy, axonopathy and myelinopathy. (10 Marks)
- b) What are the mode of action of:
- Botulinum toxic
  - Tetrodotoxin
  - Tetanus toxin
  - Black widow spider toxin
- (15 Marks)

**QUESTION 2**

Why are children vulnerable to toxicants (25 Marks)

**QUESTION 3**

- a) What types of damage can the liver have? (15 Marks)
- b) Discuss the unique vulnerability of the central nervous system. (10 marks)

**QUESTION 4**

- a) What are the two mechanisms of cell death in the kidney? (10 Marks)
- b) How does one test for kidney damage? 15 Marks)

**QUESTION 5**

a) Write short notes on:

- vinylchloride
- asbestos
- aromatic amines

(15 Marks)

b) Discuss the toxicology of paraquat and in particular explain the mechanism underlying the specific organ damage.

(10 Marks)